TA-F5000

SERVICE MANUAL

AEP Model
UK Model
E Model
Chinese Model

SPECIFICATIONS

System

Power Amplifier: Pure-complementary SEPP MOS FET power amplifier with all stages directly coupled
Preamplifier: Low-noise, high-gain equalizer amplifier + MC head amplifier
Power section: Large-capacity power supply advanced STD

Rated output (at 4 ohms)	45 W + 45W (DIN) 35 W + 35W (RMS, 20 Hz to 20 kHz)
Speaker impedance	4 to 16 ohms
Total harmonic distortion	0.008% (at 8 ohms, 10 W output)
Damping factor	150
Frequency response	TUNER, CD, AUX, TAPE, MD: 7 Hz to 100 kHz $^{+3}_{-3}$dB PHONO: 20 Hz to 20 kHz ±3 dB

Inputs

Input sensitivity and impedance	PHONO MC: 0.18 mV, 100 ohms MM: 1.6 mV, 50 kilohms TUNER, CD, AUX, TAPE, MD: 150 mV, 20 kilohms
S/N	PHONO MC: 75 dB (A Fil, 0.5 mV) MM: 85 dB (A Fil, 5 mV) TUNER, CD, AUX, TAPE, MD: 100 dB (input short)

Outputs

Output level / impedance	MD REC OUT, TAPE REC OUT: 150 mV, 1 kilohm PRE OUT: 600 mV, 200 ohms
Phones output	Corresponding to Low/High impedance headphones: 10 mW (8 ohms)
Tone controls	BASS (100 Hz): ±6 dB TREBLE (10 kHz): ±6 dB

General

Power requirements	220 - 230 V AC, 50/60 Hz
Power consumption	100 W
Dimensions (approx.) (w/h/d)	280 x 100 x 400 mm (11 x 3 $^{15}/_{16}$ x 15 $^{3}/_{4}$ inches) incl. projecting parts and controls
Mass (approx.)	7.0 kg (15 lb 7 oz)

Supplied accessories

Shorting plug* (2)
Mains lead (1)
* plugged into the PHONO jacks when shipped from the factory

Design and specifications are subject to change without notice.

INTEGRATED STEREO AMPLIFIER

SONY®

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Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

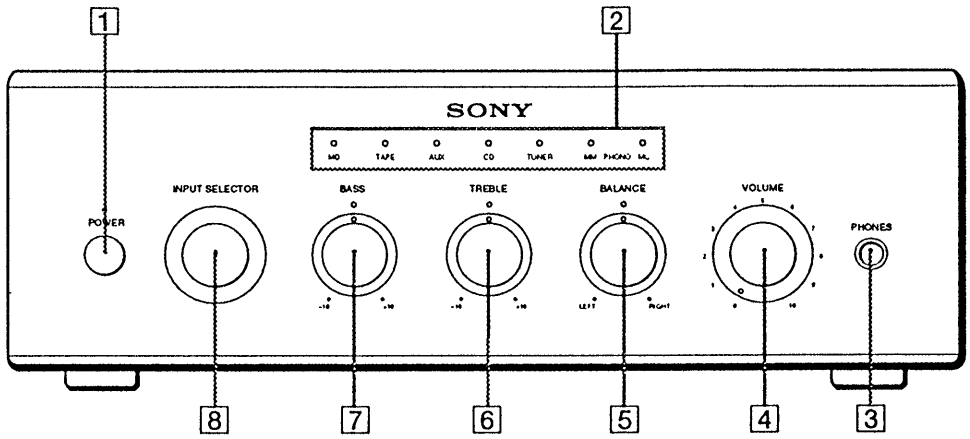
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

This section is extracted from instruction manual.

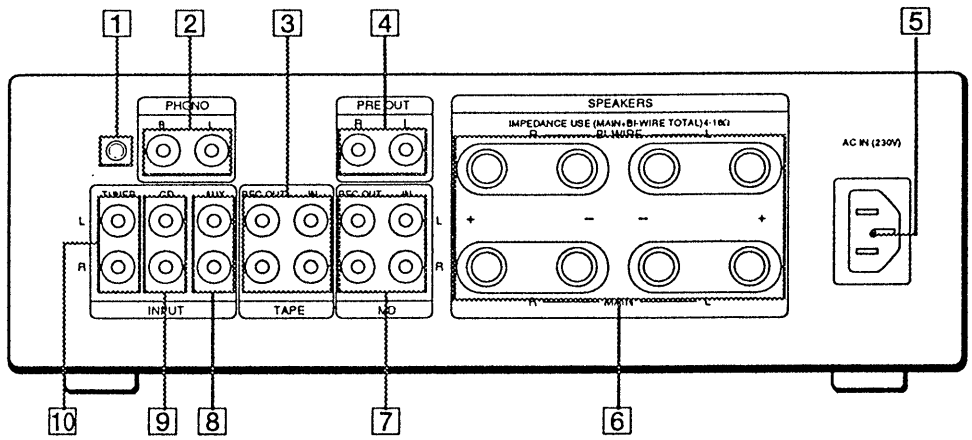
Front and Rear Panel Descriptions

Front panel



1 POWER
2 Input source indicator
3 PHONES
4 VOLUME
5 BALANCE
6 TREBLE
7 BASS
8 INPUT SELECTOR

Rear panel



1 ⏚ earth terminal
2 PHONO
3 TAPE
4 PRE OUT
5 AC IN (230 V)
6 SPEAKERS
7 MD
8 AUX
9 CD
10 TUNER

SECTION 2
ELECTRICAL ADJUSTMENTS

Idling (DC Balance) Adjustment

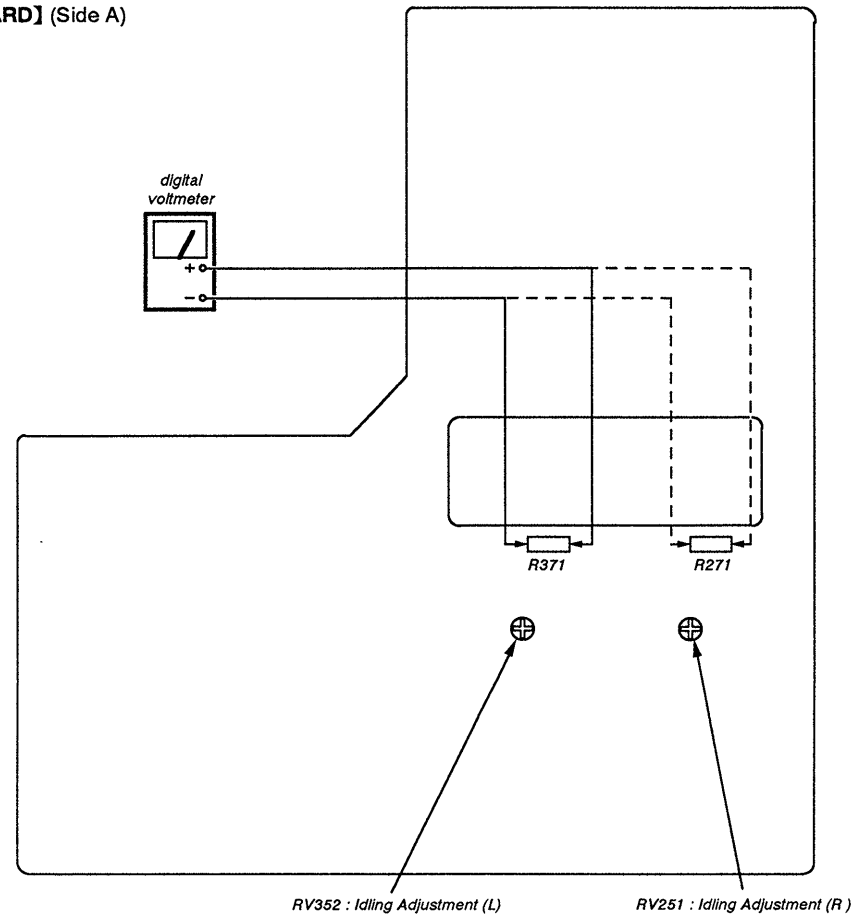
- Cautions during adjustment
  Adjust immediately after turning on the power and then readjust 5 minutes afterwards.

Procedure :

1. Connect a digital voltmeter across both ends of R271 (R-CH), and R371 (L-CH) on the main board.
2. Adjust RV251 (R-CH) and R352 (L-CH) so that the readings on the digital voltmeter are 22 ± 3mV.

Adjustment Location :

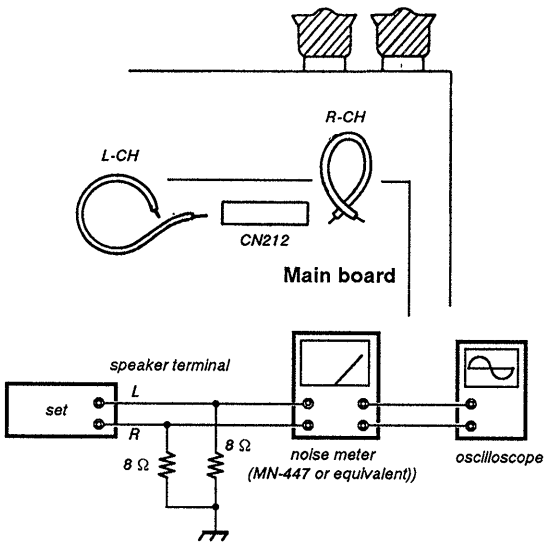
[MAIN BOARD] (Side A)



Ham Adjustment

Setting :

1. Join the PHONO input terminals with a shorting pin and connect the noise meter, oscilloscope as shown the figure below.
2. Use the tweezers as shown in the drawing below and form the wire as shown.



3. Set the POWER switch to ON.

Procedure :

1. Set the FUNCTION to PHONO/MC, set the VOL (volume) to maximum and make the measurements.

   Reference value : (filter : A filter, mode : AVR)
   − 46dBm or less

   * When higher than the reference value, make the adjustments below.

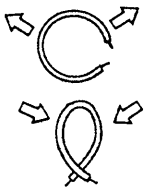
   ● When the L-CH value is too high ····· Adjust the wire on the left side of CN212

   ● When the R-CH value is too high ····· Adjust the wire on the right side of CN212

   ⓐ Place the tweezers inside the loop

   ● If the noise decreases, widen the loop.

   ● If the noise increases, contract the loop.



   * Make the adjustments in ⓑ below when the readings are higher than the reference value.

   ⓑ Tilt the loop up and down, aligning it at the position with the least noise.

   * Make the adjustments in ⓒ below when the readings are higher than the reference value.

   ⓒ Bring the wire material (6P) from CN101 to the side panel.

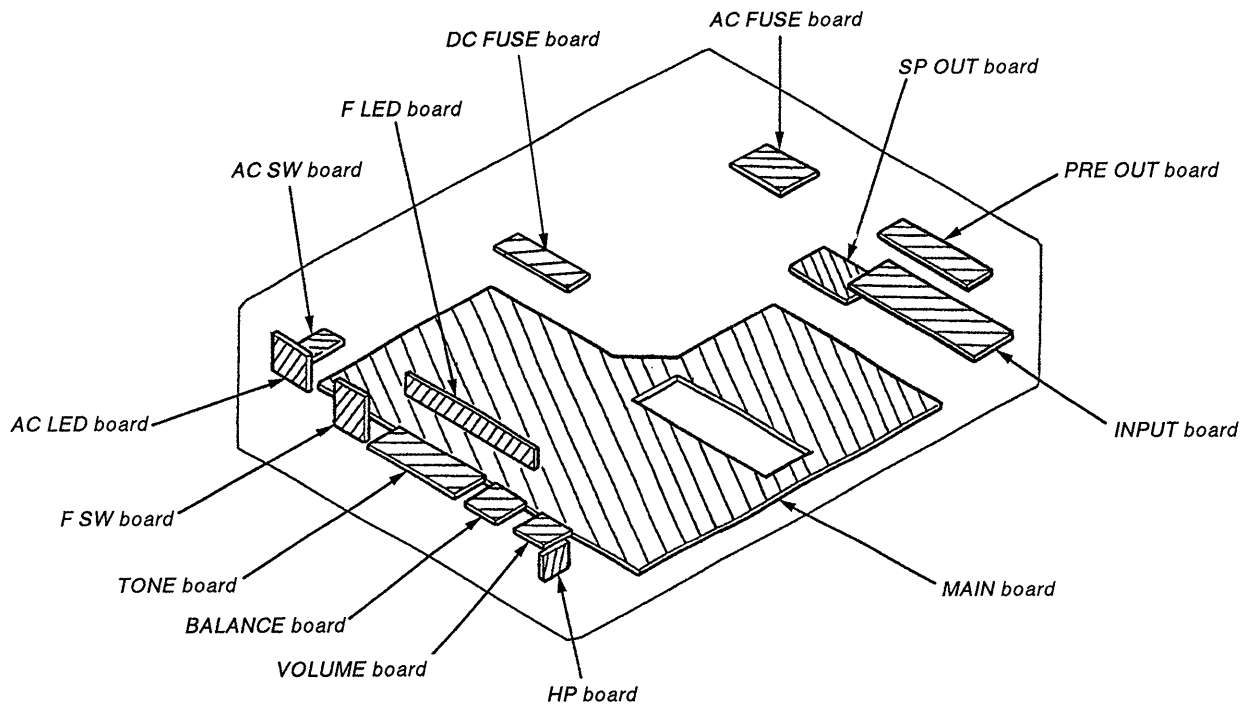
2. Place the lid back on and check the noise level.

   * Readjust when the level is higher than the reference.
   (Adjust in the cancelling direction.)
   Reference value : − 44dBm or less

3. Turn OFF the power when the above adjustments are finished and remove the cables.

SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. PRINTED WIRING BOARDS

• SEMICONDUCTOR LOCATION

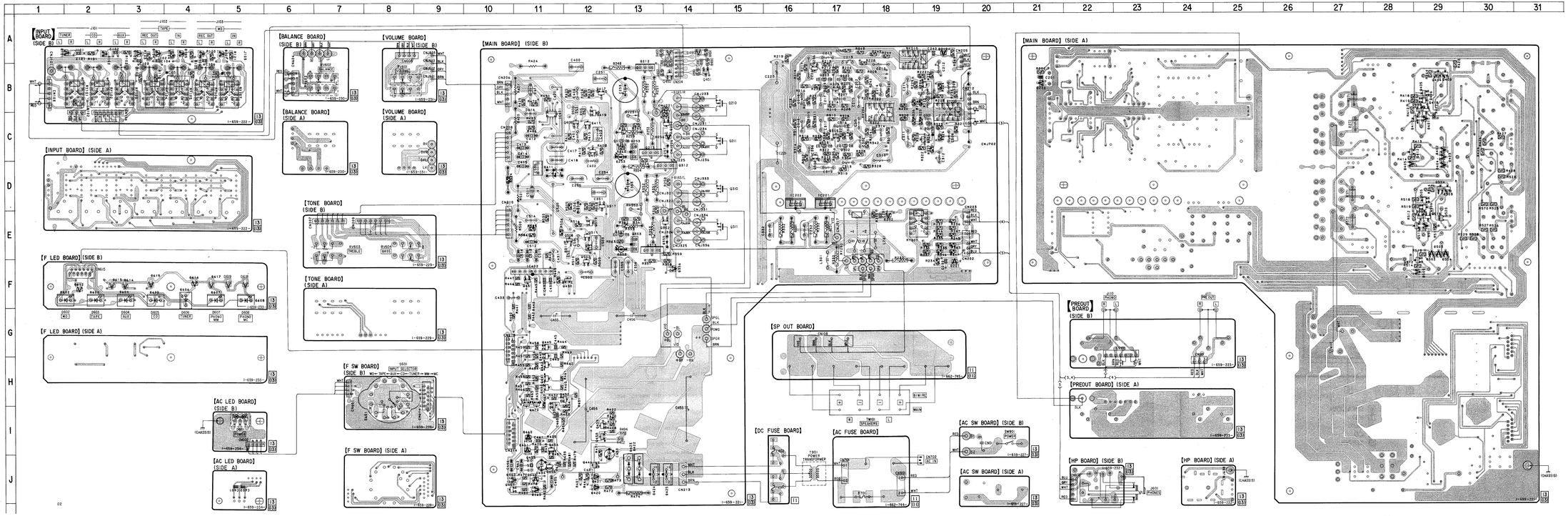
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	A - 2	D608	F - 5	Q410	C - 29
D102	A - 2	D612	F - 2	Q411	C - 12
D103	A - 3	D613	F - 2	Q412	C - 28
D104	A - 3	D614	F - 3	Q417	B - 12
D105	A - 4	D615	F - 3	Q418	B - 28
D106	A - 4	D616	F - 4	Q419	C - 12
D107	A - 5	D617	F - 4	Q420	B - 29
D200	B - 21	D618	F - 5	Q430	F - 12
D201	E - 18	D619	F - 5	Q431	F - 11
D202	E - 18			Q440	H - 11
D210	A - 19	IC201	D - 17	Q441	H - 11
D253	C - 13	IC202	D - 16	Q442	H - 11
D256	C - 14	IC401	C - 11	Q443	G - 11
D257	C - 14	IC402	F - 11	Q445	G - 11
D353	E - 13			Q446	J - 12
D355	E - 14	Q201	B - 19	Q450	B - 14
D358	E - 14	Q202	B - 17	Q451	B - 14
D401	C - 29	Q203	B - 17	Q452	H - 12
D402	C - 29	Q204	B - 19	Q453	H - 11
D403	C - 29	Q205	B - 17	Q454	I - 11
D404	D - 29	Q206	B - 17	Q455	J - 11
D405	D - 28	Q210	B - 15	Q456	J - 11
D411	D - 11	Q211	C - 15	Q457	J - 10
D412	D - 11	Q212	B - 13	Q458	I - 12
D420	J - 12	Q213	C - 13	Q459	I - 12
D421	J - 12	Q251	C - 13	Q470	H - 11
D422	J - 13	Q252	C - 14	Q503	D - 29
D423	J - 13	Q253	C - 13	Q505	D - 29
D424	J - 13	Q301	C - 19	Q506	D - 29
D425	J - 14	Q302	C - 17	Q507	F - 12
D460	I - 11	Q303	C - 17	Q508	E - 12
D461	I - 11	Q304	C - 19	Q509	E - 29
D462	J - 10	Q305	C - 17	Q510	E - 29
D463	J - 11	Q306	C - 17	Q511	E - 12
D464	J - 11	Q310	D - 15	Q512	F - 29
D490	A - 14	Q311	E - 15	Q517	D - 12
D491	A - 14	Q312	D - 14	Q518	E - 29
D501	E - 29	Q313	E - 13	Q519	E - 12
D502	E - 29	Q351	E - 13	Q520	E - 29
D503	E - 29	Q352	E - 14	Q554	D - 29
D504	E - 29	Q353	E - 13		
D505	F - 29	Q401	H - 11		
D601	I - 5	Q403	B - 29		
D602	F - 2	Q404	B - 29		
		Q405	B - 29		
D603	F - 2				
D604	F - 3	Q406	B - 29		
D605	F - 3	Q407	C - 12		
D606	F - 4	Q408	C - 12		
D607	F - 5	Q409	B - 29		

Note:

- O—— : parts extracted from the component side.
- ◯ : Through hole.
- ▒▒▒▒ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated)

Caution :

Pattern face side : Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
Parts face side : Parts on the parts face side seen from the (Component side) parts face are indicated.

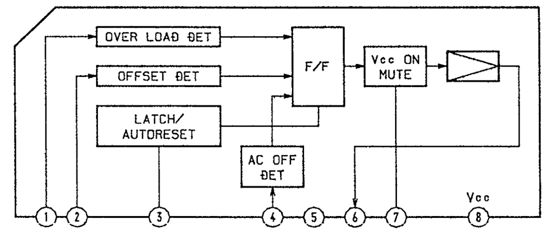

[INPUT BOARD] (SIDE B)
[INPUT BOARD] (SIDE A)
[BALANCE BOARD] (SIDE B)
[BALANCE BOARD] (SIDE A)
[VOLUME BOARD] (SIDE B)
[VOLUME BOARD] (SIDE A)
[TONE BOARD] (SIDE B)
[TONE BOARD] (SIDE A)
[F LED BOARD] (SIDE B)
[F LED BOARD] (SIDE A)
[AC LED BOARD] (SIDE B)
[AC LED BOARD] (SIDE A)
[F SW BOARD] (SIDE B)
[F SW BOARD] (SIDE A)
[MAIN BOARD] (SIDE B)
[MAIN BOARD] (SIDE A)
[SP OUT BOARD]
[DC FUSE BOARD]
[AC FUSE BOARD]
[AC SW BOARD] (SIDE B)
[AC SW BOARD] (SIDE A)
[PREOUT BOARD] (SIDE B)
[PREOUT BOARD] (SIDE A)
[HP BOARD] (SIDE B)
[HP BOARD] (SIDE A)

3-3. SCHEMATIC DIAGRAM

[MAIN BOARD]
[BALANCE BOARD]
[VOLUME BOARD]
[TONE BOARD]
[AC LED BOARD]
[F SW BOARD]
[F LED BOARD]
[PRE OUT BOARD]
[INPUT BOARD]
[SP OUT BOARD]
[HP BOARD]
[DC FUSE BOARD]
[AC FUSE BOARD]
[AC SW BOARD]
IC401 TONE AMP
IC402 PROTECT
IC201 +18.2V REG
IC202 -18.3V REG
Q420 PRE AMP
Q520 PRE AMP
Q403-406 PRE DRIVE
Q503, 505, 506, 554 PRE DRIVE
Q212, 213 DRIVE
Q312, 313 DRIVE
Q210 2SJ200 POWER AMP
Q211 2SK1529 POWER AMP
Q310 2SJ200A POWER AMP
Q311 2SK1529A POWER AMP
Q251, 253 BIAS
Q351, 353 BIAS
Q202, 203, 205, 206 EQ AMP
Q302, 303, 305, 306 EQ AMP
Q201, 204 MC AMP
Q301, 304 MC AMP
Q401, 440-443, 445, 470 RELAY DRIVE
Q458, 459 LED +B SWITCH
Q454-456 RELAY CONTROL
Q457 RELAY DRIVE
Q446 MUTE SWITCH
Q450, 451 RELAY MUTE
T901 POWER TRANSFORMER
S601 INPUT SELECTOR
MD←TAPE←AUX←CD←TUNER→MM→MC

• IC BLOCK DIAGRAM

IC402 μPC1237HA



Note :

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- B+ : B+ Line
- B − : B − Line
- : adjustment for repair.
- Voltages are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : PHONO

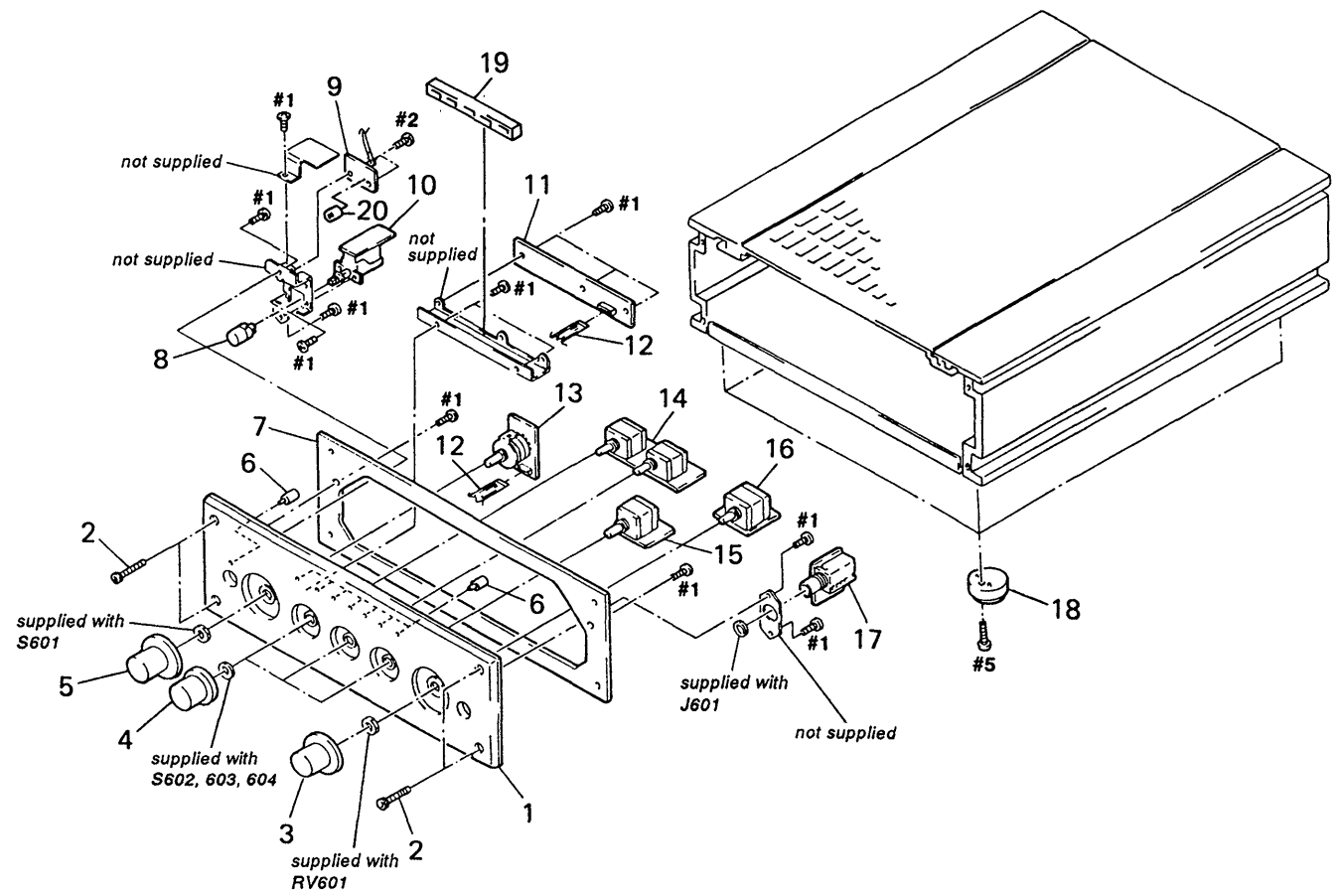
SECTION 4
EXPLODED VIEWS

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

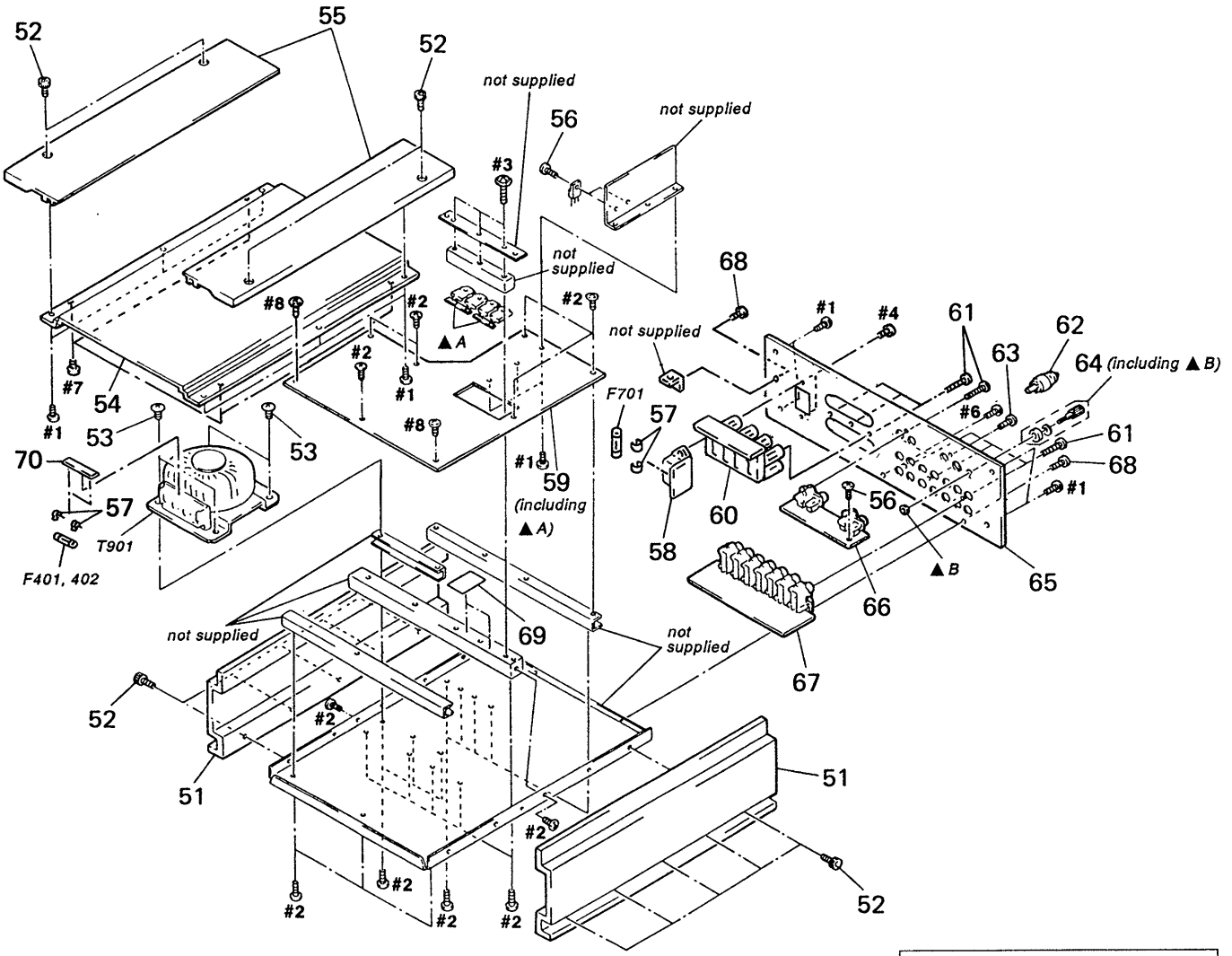
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	4-979-049-01	PANEL, FRONT	
2	3-910-074-31	BOLT (M3)	
3	4-979-061-01	KNOB (VOLUME)	
4	4-979-060-01	KNOB (BALANCE,TREBLE,BASS)	
5	4-979-061-11	KNOB (INPUT SELECTOR)	
6	4-979-063-01	LENS, LED	
7	4-979-053-01	SPACER	
8	X-4946-608-1	BUTTON ASSY, POWER	
* 9	1-659-234-11	AC LED BOARD	
* 10	1-659-227-11	AC SW BOARD	
* 11	1-659-233-11	F LED BOARD	
12	1-776-183-11	WIRE (FLAT TYPE)	
* 13	1-659-228-11	F SW BOARD	
* 14	1-659-229-11	TONE BOARD	
* 15	1-659-230-11	BALANCE BOARD	
* 16	1-659-231-11	VOLUME BOARD	
* 17	1-659-232-11	HP BOARD	
18	X-4947-280-1	FOOT ASSY	
* 19	4-980-530-01	PLATE, LIGHT INTERCEPTION	
* 20	4-971-833-01	TUBE (A), LIGHT INTERCEPTION	

4-2. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
51	4-979-050-01	PANEL, SIDE	
52	4-960-910-21	SCREW, ORNAMENTAL	
53	4-967-960-01	SCREW (4X8)	
54	4-979-046-01	PLATE (C), TOP	
55	4-979-021-01	PLATE (A), TOP	
56	2-259-121-01	SCREW, TR	
57	1-533-783-11	HOLDER, FUSE	
* 58	1-662-744-11	AC FUSE BOARD	
* 59	A-4378-867-A	MAIN BOARD, COMPLETE	
* 60	1-662-745-11	SP OUT BOARD	
61	4-969-221-01	SCREW (3X12)	
62	1-506-113-00	SHORT PLUG	
63	3-704-515-41	SCREW (BV/RING)	
* 64	4-935-253-01	TERMINAL, SP	
* 65	4-983-759-01	PANEL, BACK	
* 66	1-659-223-11	PRE OUT BOARD	
* 67	A-4378-868-A	NPUT BOARD, COMPLETE	
68	3-704-515-21	SCREW (BV/RING)	
* 69	4-979-359-01	INSULATOR	
* 70	1-663-750-11	DC FUSE BOARD	
⚠F401	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
⚠F402	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
⚠F701	1-532-465-51	FUSE, TIME LAG (T3.15AL/250V)	
⚠T901	1-429-749-11	TRANSFORMER, POWER	

SECTION 5
ELECTRICAL PARTS LIST

AC FUSE | AC LED | AC SW | BALANCE | DC FUSE | F LED

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-662-744-11	AC FUSE BOARD			
		**********			
	1-533-783-11	HOLDER, FUSE			
		< AC INLET >			
⚠CN702	1-251-234-11	INLET, AC (AC IN)			
		< FUSE >			
⚠F701	1-532-465-51	FUSE, TIME LAG (T3.15AL/250V)			
		< CONNECTOR >			
CN701	1-564-321-00	PIN, CONNECTOR 2P			
CN901	1-564-321-00	PIN, CONNECTOR 2P			
**********					
*	1-659-234-11	AC LED BOARD			
		**********			
		< CAPACITOR >			
C601	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C602	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
		< DIODE >			
D601	8-719-313-40	LED SEL1516W (POWER)			
**********					
*	1-659-227-11	AC SW BOARD			
		**********			
		< CAPACITOR >			
⚠C901	1-113-920-11	ELECT	0.0022uF	20% 250V	
		< SWITCH >			
⚠SW901	1-554-538-00	SWITCH, PUSH (AC POWER)(1 KEY) (POWER)			
**********					

Ref. No.	Part No.	Description	Remark
*	1-659-230-11	BALANCE BOARD	
		**********	
		< CONNECTOR >	
CN604	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
		< VARIABLE RESISTOR >	
RV602	1-225-167-11	RES, VAR, CARBON 100K/100K (BALANCE)	
**********			
*	1-663-750-11	DC FUSE BOARD	
		**********	
	1-533-783-11	HOLDER, FUSE	
		< FUSE >	
⚠F401	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
⚠F402	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
**********			
*	1-659-233-11	F LED BOARD	
		**********	
		< DIODE >	
D602	8-719-301-49	LED SEL2810A (MD)	
D603	8-719-301-49	LED SEL2810A (TAPE)	
D604	8-719-301-49	LED SEL2810A (AUX)	
D605	8-719-301-49	LED SEL2810A (CD)	
D606	8-719-301-49	LED SEL2810A (TUNER)	
D607	8-719-301-49	LED SEL2810A (PHONO MM)	
D608	8-719-301-49	LED SEL2810A (PHONO MC)	
D612	8-719-801-78	DIODE 1SS184	
D613	8-719-801-78	DIODE 1SS184	
D614	8-719-801-78	DIODE 1SS184	
D615	8-719-801-78	DIODE 1SS184	
D616	8-719-801-78	DIODE 1SS184	
D617	8-719-801-78	DIODE 1SS184	
D618	8-719-801-78	DIODE 1SS184	

Ref. No.	Part No.	Description			Remark
D619	8-719-801-78	DIODE 1SS184			
**********					
*	1-659-228-11	F SW BOARD			
		**********			
		< CONNECTOR >			
* CN601	1-564-338-00	PIN, CONNECTOR 4P			
CN614	1-568-794-11	SOCKET, CONNECTOR 12P			
		< SWITCH >			
S601	1-762-575-11	SWITCH, ROTARY (INPUT SELECTOR)			
**********					
*	1-659-232-11	HP BOARD			
		*********			
		< CONNECTOR >			
* CN603	1-564-520-11	PLUG, CONNECTOR 5P			
		< JACK >			
J601	1-580-439-11	JACK, LARGE TYPE (PHONES)			
**********					
*	A-4378-868-A	INPUT BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C104	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C105	1-126-961-11	ELECT	2.2uF	20%	50V
C106	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-126-961-11	ELECT	2.2uF	20%	50V
		< CONNECTOR >			
* CN102	1-564-506-11	PLUG, CONNECTOR 3P			
CN103	1-691-766-31	PLUG (MICRO CONNECTOR) 4P			
		< DIODE >			
D101	8-719-801-78	DIODE 1SS184			
D102	8-719-801-78	DIODE 1SS184			
D103	8-719-801-78	DIODE 1SS184			
D104	8-719-801-78	DIODE 1SS184			
D105	8-719-801-78	DIODE 1SS184			
D106	8-719-801-78	DIODE 1SS184			
D107	8-719-801-78	DIODE 1SS184			
		< JACK >			
J101	1-566-883-31	JACK, PIN 6P (TUNER/CD/AUX)			
J102	1-566-882-41	JACK, PIN 4P (TAPE IN/REC OUT)			
J103	1-566-882-41	JACK, PIN 4P (MD IN/REC OUT)			
		< RESISTOR >			
R101	1-259-992-11	CARBON MELF	560	2%	1/8W
R102	1-259-992-11	CARBON MELF	560	2%	1/8W
R103	1-259-992-11	CARBON MELF	560	2%	1/8W
R104	1-259-992-11	CARBON MELF	560	2%	1/8W
R105	1-259-992-11	CARBON MELF	560	2%	1/8W
R109	1-259-995-11	CARBON MELF	1K	2%	1/8W
R110	1-259-995-11	CARBON MELF	1K	2%	1/8W
R120	1-259-992-11	CARBON MELF	560	2%	1/8W
R121	1-259-992-11	CARBON MELF	560	2%	1/8W
R122	1-259-995-11	CARBON MELF	1K	2%	1/8W
R123	1-259-995-11	CARBON MELF	1K	2%	1/8W
**********					
*	A-4378-867-A	MAIN BOARD, COMPLETE			
		**********			
	2-259-121-01	SCREW, TR			
	7-682-547-09	SCREW +B 3X6			
		< CAPACITOR >			
C201	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C202	1-128-197-11	ELECT	10uF	20%	63V
C206	1-136-259-11	FILM	0.1uF	3%	100V
C209	1-128-201-11	ELECT	100uF	20%	63V
C210	1-115-198-11	ELECT	470uF	20%	25V
C211	1-115-198-11	ELECT	470uF	20%	25V
C212	1-128-197-11	ELECT	10uF	20%	63V
C213	1-128-200-11	ELECT	47uF	20%	63V
C214	1-115-199-11	ELECT	0.47uF	20%	63V
C215	1-136-810-11	FILM	220PF	5%	100V
C216	1-128-201-11	ELECT	100uF	20%	63V
C217	1-130-955-11	FILM	0.01uF	3%	100V
C218	1-110-495-11	ELECT	220uF	20%	25V
C219	1-128-197-11	ELECT	10uF	20%	63V
C220	1-128-205-11	ELECT	1000uF	20%	63V
C221	1-128-205-11	ELECT	1000uF	20%	63V
C230	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C231	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C232	1-130-973-00	FILM	0.022uF	3%	100V
C240	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C251	1-136-810-11	FILM	220PF	5%	100V
C253	1-110-495-11	ELECT	220uF	20%	25V
C254	1-130-955-11	FILM	0.01uF	3%	100V
C255	1-130-955-11	FILM	0.01uF	3%	100V
C291	1-136-810-11	FILM	220PF	5%	100V
C302	1-128-197-11	ELECT	10uF	20%	63V
C306	1-136-259-11	FILM	0.1uF	3%	100V
C309	1-128-201-11	ELECT	100uF	20%	63V
C310	1-115-198-11	ELECT	470uF	20%	25V
C311	1-115-198-11	ELECT	470uF	20%	25V

Ref. No.	Part No.	Description			Remark
C312	1-128-197-11	ELECT	10uF	20%	63V
C313	1-128-200-11	ELECT	47uF	20%	63V
C314	1-115-199-11	ELECT	0.47uF	20%	63V
C315	1-136-810-11	FILM	220PF	5%	100V
C316	1-128-201-11	ELECT	100uF	20%	63V
C317	1-130-955-11	FILM	0.01uF	3%	100V
C318	1-110-495-11	ELECT	220uF	20%	25V
C319	1-128-197-11	ELECT	10uF	20%	63V
C332	1-130-973-00	FILM	0.022uF	3%	100V
C351	1-136-810-11	FILM	220PF	5%	100V
C353	1-110-495-11	ELECT	220uF	20%	25V
C354	1-130-955-11	FILM	0.01uF	3%	100V
C355	1-130-955-11	FILM	0.01uF	3%	100V
C391	1-136-810-11	FILM	220PF	5%	100V
C400	1-136-810-11	FILM	220PF	5%	100V
C401	1-115-197-11	ELECT	100uF	20%	25V
C402	1-115-197-11	ELECT	100uF	20%	25V
C403	1-136-813-11	FILM	680PF	5%	100V
C406	1-115-197-11	ELECT	100uF	20%	25V
C411	1-130-973-00	FILM	0.022uF	3%	100V
C412	1-136-233-11	FILM	0.0047uF	3%	100V
C413	1-136-169-00	FILM	0.22uF	5%	50V
C414	1-136-169-00	FILM	0.22uF	5%	50V
C415	1-136-164-00	FILM	0.082uF	5%	50V
C416	1-115-345-11	POLYSTYRENE	12PF	2PF	125V
C417	1-130-955-11	FILM	0.01uF	3%	100V
C418	1-130-955-11	FILM	0.01uF	3%	100V
C420	1-115-196-11	FILM	0.47uF	5%	200V
C430	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C431	1-124-122-11	ELECT	100uF	20%	50V
C432	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C433	1-124-910-11	ELECT	47uF	20%	50V
C434	1-124-720-11	ELECT	4.7uF	20%	50V
C435	1-136-175-00	FILM	0.68uF	5%	50V
C443	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C445	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C446	1-136-177-00	FILM	1uF	5%	50V
C450	1-124-720-11	ELECT	4.7uF	20%	50V
C451	1-136-880-11	FILM	2.2uF	10%	160V
C453	1-115-195-11	ELECT	10000uF	20%	63V
C454	1-115-195-11	ELECT	10000uF	20%	63V
C455	1-115-194-11	ELECT	3000uF	20%	63V
C456	1-115-194-11	ELECT	3000uF	20%	63V
C460	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C461	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C462	1-136-165-00	FILM	0.1uF	5%	50V
C490	1-163-034-00	CERAMIC CHIP	0.033uF		50V
C491	1-163-034-00	CERAMIC CHIP	0.033uF		50V
C500	1-136-810-11	FILM	220PF	5%	100V
C501	1-115-197-11	ELECT	100uF	20%	25V
C502	1-115-197-11	ELECT	100uF	20%	25V
C503	1-136-813-11	FILM	680PF	5%	100V

Ref. No.	Part No.	Description			Remark
C506	1-115-197-11	ELECT	100uF	20%	25V
C511	1-130-973-00	FILM	0.022uF	3%	100V
C512	1-136-233-11	FILM	0.0047uF	3%	100V
C513	1-136-169-00	FILM	0.22uF	5%	50V
C514	1-136-169-00	FILM	0.22uF	5%	50V
C515	1-136-164-00	FILM	0.082uF	5%	50V
C516	1-115-345-11	POLYSTYRENE	12PF	2PF	125V
C520	1-115-196-11	FILM	0.47uF	5%	200V
		< CONNECTOR >			
CN202	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
CN203	1-564-506-11	PLUG, CONNECTOR 3P			
* CN204	1-564-341-11	PIN, CONNECTOR 7P			
CN205	1-564-506-11	PLUG, CONNECTOR 3P			
CN206	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
* CN208	1-564-509-11	PLUG, CONNECTOR 6P			
* CN210	1-564-509-11	PLUG, CONNECTOR 6P			
CN212	1-564-510-11	PLUG, CONNECTOR 7P			
* CN213	1-564-104-00	PIN, CONNECTOR (B3P-VH) 3P			
CN214	1-568-794-11	SOCKET, CONNECTOR 12P			
CN215	1-568-794-11	SOCKET, CONNECTOR 12P			
CN615	1-568-794-11	SOCKET, CONNECTOR 12P			
		< DIODE >			
D200	8-719-801-78	DIODE 1SS184			
D201	8-719-801-78	DIODE 1SS184			
D202	8-719-801-78	DIODE 1SS184			
D210	8-719-801-78	DIODE 1SS184			
D253	8-719-310-60	LED SEL1510C-C			
D256	8-719-801-78	DIODE 1SS184			
D257	8-719-210-21	DIODE 11EQS04			
D353	8-719-310-60	LED SEL1510C-C			
D355	8-719-210-21	DIODE 11EQS04			
D356	8-719-801-78	DIODE 1SS184			
D401	8-719-800-76	DIODE 1SS226			
D402	8-719-800-76	DIODE 1SS226			
D403	8-719-800-76	DIODE 1SS226			
D404	8-719-800-76	DIODE 1SS226			
D405	8-719-800-76	DIODE 1SS226			
D411	8-719-933-59	DIODE HZS9C1L			
D412	8-719-933-59	DIODE HZS9C1L			
D420	8-719-801-78	DIODE 1SS184			
D421	8-719-801-78	DIODE 1SS184			
D422	8-719-200-39	DIODE C16P20F			
D423	8-719-200-40	DIODE C16P20FR			
D424	8-719-210-38	DIODE F10P20FR			
D425	8-719-210-30	DIODE F10P20F(R)			
D460	8-719-801-78	DIODE 1SS184			
D461	8-719-801-78	DIODE 1SS184			
D462	8-719-801-78	DIODE 1SS184			
D463	8-719-801-78	DIODE 1SS184			
D464	8-719-801-78	DIODE 1SS184			

MAIN

Ref. No.	Part No.	Description	Remark
D490	8-719-801-78	DIODE 1SS184	
D491	8-719-801-78	DIODE 1SS184	
D501	8-719-800-76	DIODE 1SS226	
D502	8-719-800-76	DIODE 1SS226	
D503	8-719-800-76	DIODE 1SS226	
D504	8-719-800-76	DIODE 1SS226	
D505	8-719-800-76	DIODE 1SS226	
		< IC >	
IC201	8-759-604-87	IC M5F7818L	
IC202	8-759-604-91	IC M5F7918L	
IC401	8-759-296-74	IC AD712JR-REEL	
IC402	8-759-111-68	IC uPC1237HA	
		< COIL >	
L201	1-411-766-11	COIL, AIR-CORE	
L301	1-411-766-11	COIL, AIR-CORE	
		< TRANSISTOR >	
Q201	8-729-354-52	TRANSISTOR 2SC2545	
Q202	8-729-354-52	TRANSISTOR 2SC2545	
Q203	8-729-354-52	TRANSISTOR 2SC2545	
Q204	8-729-035-24	TRANSISTOR 2SA1411-L-T1	
Q205	8-729-035-24	TRANSISTOR 2SA1411-L-T1	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q210	8-729-018-17	TRANSISTOR 2SJ200A-Y	
Q211	8-729-018-15	TRANSISTOR 2SK1529A-Y	
Q212	8-729-018-21	TRANSISTOR 2SJ313-Y	
Q213	8-729-018-19	TRANSISTOR 2SK2013-Y	
Q251	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q252	8-729-216-31	TRANSISTOR 2SA1163-G	
Q253	8-729-203-45	TRANSISTOR 2SC3423-O	
Q301	8-729-354-52	TRANSISTOR 2SC2545	
Q302	8-729-354-52	TRANSISTOR 2SC2545	
Q303	8-729-354-52	TRANSISTOR 2SC2545	
Q304	8-729-035-24	TRANSISTOR 2SA1411-L-T1	
Q305	8-729-035-24	TRANSISTOR 2SA1411-L-T1	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q310	8-729-018-17	TRANSISTOR 2SJ200A-Y	
Q311	8-729-018-15	TRANSISTOR 2SK1529A-Y	
Q312	8-729-018-21	TRANSISTOR 2SJ313-Y	
Q313	8-729-018-19	TRANSISTOR 2SK2013-Y	
Q351	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q352	8-729-216-31	TRANSISTOR 2SA1163-G	
Q353	8-729-203-45	TRANSISTOR 2SC3423-O	
Q401	8-729-216-22	TRANSISTOR 2SA1162-G	
Q403	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q404	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-232-69	TRANSISTOR 2SK208GR3	
Q408	8-729-230-49	TRANSISTOR 2SC2712-YG	

Ref. No.	Part No.	Description	Remark
Q409	8-729-216-31	TRANSISTOR 2SA1163-G	
Q410	8-729-216-31	TRANSISTOR 2SA1163-G	
Q411	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q412	8-729-271-31	TRANSISTOR 2SC2713-G	
Q417	8-729-232-69	TRANSISTOR 2SK208GR3	
Q418	8-729-232-69	TRANSISTOR 2SK208GR3	
Q419	8-729-232-69	TRANSISTOR 2SK208GR3	
Q420	8-729-023-11	TRANSISTOR 2SK2145GTE85L	
Q430	8-729-216-22	TRANSISTOR 2SA1162-G	
Q431	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q440	8-729-216-22	TRANSISTOR 2SA1162-G	
Q441	8-729-216-22	TRANSISTOR 2SA1162-G	
Q442	8-729-216-22	TRANSISTOR 2SA1162-G	
Q443	8-729-216-22	TRANSISTOR 2SA1162-G	
Q445	8-729-216-22	TRANSISTOR 2SA1162-G	
Q446	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q450	8-729-901-04	TRANSISTOR DTA114EK	
Q451	8-729-901-04	TRANSISTOR DTA114EK	
Q452	8-729-216-22	TRANSISTOR 2SA1162-G	
Q453	8-729-216-22	TRANSISTOR 2SA1162-G	
Q454	8-729-216-22	TRANSISTOR 2SA1162-G	
Q455	8-729-200-56	TRANSISTOR 2SK241-GR	
Q456	8-729-216-22	TRANSISTOR 2SA1162-G	
Q457	8-729-216-22	TRANSISTOR 2SA1162-G	
Q458	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q459	8-729-216-22	TRANSISTOR 2SA1162-G	
Q470	8-729-216-22	TRANSISTOR 2SA1162-G	
Q503	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q505	8-729-216-22	TRANSISTOR 2SA1162-G	
Q506	8-729-216-22	TRANSISTOR 2SA1162-G	
Q507	8-729-232-69	TRANSISTOR 2SK208GR3	
Q508	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q509	8-729-216-31	TRANSISTOR 2SA1163-G	
Q510	8-729-216-31	TRANSISTOR 2SA1163-G	
Q511	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q512	8-729-271-31	TRANSISTOR 2SC2713-G	
Q517	8-729-232-69	TRANSISTOR 2SK208GR3	
Q518	8-729-232-69	TRANSISTOR 2SK208GR3	
Q519	8-729-232-69	TRANSISTOR 2SK208GR3	
Q520	8-729-023-11	TRANSISTOR 2SK2145GTE85L	
Q554	8-729-230-49	TRANSISTOR 2SC2712-YG	
		< RESISTOR >	
R200	1-259-987-11	CARBON MELF 220 2% 1/8W	
R201	1-260-017-11	CARBON MELF 56K 2% 1/8W	
R202	1-260-028-11	CARBON MELF 470K 2% 1/8W	
R203	1-260-021-11	CARBON MELF 120K 2% 1/8W	
R204	1-259-987-11	CARBON MELF 220 2% 1/8W	
R205	1-259-991-11	CARBON MELF 470 2% 1/8W	
R206	1-260-014-11	CARBON MELF 33K 2% 1/8W	
R207	1-260-002-11	CARBON MELF 3.3K 2% 1/8W	
R208	1-259-998-11	CARBON MELF 1.8K 2% 1/8W	

Ref. No.	Part No.	Description			Remark
R209	1-259-995-11	CARBON MELF	1K	2%	1/8W
R210	1-259-929-11	CARBON MELF	3.6K	2%	1/8W
R211	1-260-015-11	CARBON MELF	39K	2%	1/8W
R212	1-260-010-11	CARBON MELF	15K	2%	1/8W
R213	1-259-984-11	CARBON MELF	120	2%	1/8W
R214	1-260-001-11	CARBON MELF	2.7K	2%	1/8W
R215	1-259-988-11	CARBON MELF	270	2%	1/8W
R216	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R217	1-259-943-11	CARBON MELF	51K	2%	1/8W
R218	1-260-020-11	CARBON MELF	100K	2%	1/8W
R219	1-259-976-11	CARBON MELF	27	2%	1/8W
R220	1-259-975-11	CARBON MELF	22	2%	1/8W
R221	1-259-983-11	CARBON MELF	100	2%	1/8W
R222	1-259-995-11	CARBON MELF	1K	2%	1/8W
R223	1-260-010-11	CARBON MELF	15K	2%	1/8W
R224	1-260-008-11	CARBON MELF	10K	2%	1/8W
R225	1-259-989-11	CARBON MELF	330	2%	1/8W
R226	1-259-991-11	CARBON MELF	470	2%	1/8W
R227	1-260-004-11	CARBON MELF	4.7K	2%	1/8W
R228	1-259-976-11	CARBON MELF	27	2%	1/8W
R229	1-259-989-11	CARBON MELF	330	2%	1/8W
⚠R230	1-212-958-00	FUSIBLE	10	5%	1/2W F
⚠R231	1-212-950-00	FUSIBLE	4.7	5%	1/2W F
⚠R232	1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R233	1-259-986-11	CARBON MELF	180	2%	1/8W
R234	1-249-415-11	CARBON	680	5%	1/4W
R235	1-259-991-11	CARBON MELF	470	2%	1/8W
R236	1-259-987-11	CARBON MELF	220	2%	1/8W
R237	1-260-004-11	CARBON MELF	4.7K	2%	1/8W
R238	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R239	1-259-929-11	CARBON MELF	3.6K	2%	1/8W
R240	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R241	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R242	1-260-029-11	CARBON MELF	560K	2%	1/8W
R243	1-260-008-11	CARBON MELF	10K	2%	1/8W
R244	1-259-995-11	CARBON MELF	1K	2%	1/8W
R245	1-259-991-11	CARBON MELF	470	2%	1/8W
R246	1-259-991-11	CARBON MELF	470	2%	1/8W
R247	1-259-991-11	CARBON MELF	470	2%	1/8W
⚠R248	1-212-982-00	FUSIBLE	100	5%	1/2W F
R249	1-259-992-11	CARBON MELF	560	2%	1/8W
⚠R251	1-212-974-00	FUSIBLE	47	5%	1/2W F
⚠R252	1-212-990-00	FUSIBLE	220	5%	1/2W F
⚠R253	1-212-974-00	FUSIBLE	47	5%	1/2W F
R254	1-259-999-11	CARBON MELF	2.2K	2%	1/8W
R256	1-259-999-11	CARBON MELF	2.2K	2%	1/8W
R257	1-260-010-11	CARBON MELF	15K	2%	1/8W
R258	1-260-008-11	CARBON MELF	10K	2%	1/8W
⚠R259	1-212-982-00	FUSIBLE	100	5%	1/2W F
R260	1-259-995-11	CARBON MELF	1K	2%	1/8W
R261	1-260-005-11	CARBON MELF	5.6K	2%	1/8W
R262	1-259-997-11	CARBON MELF	1.5K	2%	1/8W
R264	1-259-987-11	CARBON MELF	220	2%	1/8W
⚠R271	1-208-602-31	METAL WIRE	0.22	10%	2W F
⚠R272	1-208-602-31	METAL WIRE	0.22	10%	2W F
R301	1-260-017-11	CARBON MELF	56K	2%	1/8W
R302	1-260-028-11	CARBON MELF	470K	2%	1/8W
R303	1-260-021-11	CARBON MELF	120K	2%	1/8W
R304	1-259-987-11	CARBON MELF	220	2%	1/8W
R305	1-259-991-11	CARBON MELF	470	2%	1/8W
R306	1-260-014-11	CARBON MELF	33K	2%	1/8W
R307	1-260-002-11	CARBON MELF	3.3K	2%	1/8W
R308	1-259-998-11	CARBON MELF	1.8K	2%	1/8W
R309	1-259-995-11	CARBON MELF	1K	2%	1/8W
R310	1-259-929-11	CARBON MELF	3.6K	2%	1/8W
R311	1-260-015-11	CARBON MELF	39K	2%	1/8W
R312	1-260-010-11	CARBON MELF	15K	2%	1/8W
R313	1-259-984-11	CARBON MELF	120	2%	1/8W
R314	1-260-001-11	CARBON MELF	2.7K	2%	1/8W
R315	1-259-988-11	CARBON MELF	270	2%	1/8W
R316	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R317	1-259-943-11	CARBON MELF	51K	2%	1/8W
R318	1-260-020-11	CARBON MELF	100K	2%	1/8W
R319	1-259-976-11	CARBON MELF	27	2%	1/8W
R320	1-259-975-11	CARBON MELF	22	2%	1/8W
R321	1-259-983-11	CARBON MELF	100	2%	1/8W
R322	1-259-995-11	CARBON MELF	1K	2%	1/8W
R323	1-260-010-11	CARBON MELF	15K	2%	1/8W
R324	1-260-008-11	CARBON MELF	10K	2%	1/8W
R325	1-259-989-11	CARBON MELF	330	2%	1/8W
R326	1-259-991-11	CARBON MELF	470	2%	1/8W
R327	1-260-004-11	CARBON MELF	4.7K	2%	1/8W
R328	1-259-976-11	CARBON MELF	27	2%	1/8W
R329	1-259-989-11	CARBON MELF	330	2%	1/8W
⚠R330	1-212-958-00	FUSIBLE	10	5%	1/2W F
⚠R331	1-212-950-00	FUSIBLE	4.7	5%	1/2W F
⚠R332	1-212-950-00	FUSIBLE	4.7	5%	1/2W F
R335	1-259-991-11	CARBON MELF	470	2%	1/8W
R336	1-259-987-11	CARBON MELF	220	2%	1/8W
R337	1-260-004-11	CARBON MELF	4.7K	2%	1/8W
R338	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R339	1-259-929-11	CARBON MELF	3.6K	2%	1/8W
R342	1-260-029-11	CARBON MELF	560K	2%	1/8W
R343	1-260-008-11	CARBON MELF	10K	2%	1/8W
R344	1-259-995-11	CARBON MELF	1K	2%	1/8W
R345	1-259-991-11	CARBON MELF	470	2%	1/8W
R346	1-259-991-11	CARBON MELF	470	2%	1/8W
R347	1-259-991-11	CARBON MELF	470	2%	1/8W
⚠R351	1-212-974-00	FUSIBLE	47	5%	1/2W F
⚠R352	1-212-990-00	FUSIBLE	220	5%	1/2W F
⚠R353	1-212-974-00	FUSIBLE	47	5%	1/2W F
⚠R354	1-212-982-00	FUSIBLE	100	5%	1/2W F
⚠R355	1-212-982-00	FUSIBLE	100	5%	1/2W F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description			Remark
R357	1-259-999-11	CARBON MELF	2.2K	2%	1/8W
R358	1-260-010-11	CARBON MELF	15K	2%	1/8W
R359	1-260-008-11	CARBON MELF	10K	2%	1/8W
R360	1-259-999-11	CARBON MELF	2.2K	2%	1/8W
R361	1-259-995-11	CARBON MELF	1K	2%	1/8W
R362	1-260-005-11	CARBON MELF	5.6K	2%	1/8W
R363	1-259-997-11	CARBON MELF	1.5K	2%	1/8W
R364	1-259-987-11	CARBON MELF	220	2%	1/8W
⚠R371	1-208-602-31	METAL WIRE	0.22	10%	2W F
⚠R372	1-208-602-31	METAL WIRE	0.22	10%	2W F
R400	1-249-696-11	CARBON	9.1K	5%	1/2W
R401	1-260-007-11	CARBON MELF	8.2K	2%	1/8W
R402	1-208-518-41	METAL GLAZE	22K	2%	1/10W
R403	1-260-009-11	CARBON MELF	12K	2%	1/8W
R404	1-260-009-11	CARBON MELF	12K	2%	1/8W
R405	1-260-010-11	CARBON MELF	15K	2%	1/8W
R406	1-259-999-11	CARBON MELF	2.2K	2%	1/8W
R407	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R408	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R409	1-259-987-11	CARBON MELF	220	2%	1/8W
R410	1-260-009-11	CARBON MELF	12K	2%	1/8W
R411	1-259-992-11	CARBON MELF	560	2%	1/8W
R412	1-259-983-11	CARBON MELF	100	2%	1/8W
R413	1-259-981-11	CARBON MELF	68	2%	1/8W
R414	1-260-002-11	CARBON MELF	3.3K	2%	1/8W
R415	1-259-996-11	CARBON MELF	1.2K	2%	1/8W
R416	1-260-008-11	CARBON MELF	10K	2%	1/8W
R417	1-260-008-11	CARBON MELF	10K	2%	1/8W
R418	1-259-983-11	CARBON MELF	100	2%	1/8W
R419	1-259-983-11	CARBON MELF	100	2%	1/8W
R420	1-208-425-41	METAL GLAZE	330	2%	1/10W
R421	1-249-667-11	CARBON	560	5%	1/2W
R422	1-208-425-41	METAL GLAZE	330	2%	1/10W
R423	1-260-032-11	CARBON MELF	1M	2%	1/8W
R424	1-249-665-11	CARBON	470	5%	1/2W
R425	1-259-992-11	CARBON MELF	560	2%	1/8W
R426	1-259-997-11	CARBON MELF	1.5K	2%	1/8W
R427	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R428	1-259-934-11	CARBON MELF	9.1K	2%	1/8W
R429	1-260-026-11	CARBON MELF	330K	2%	1/8W
R430	1-260-020-11	CARBON MELF	100K	2%	1/8W
R431	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
R432	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R433	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R434	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R435	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R436	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R437	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R438	1-208-437-41	METAL GLAZE	1K	2%	1/10W
R439	1-208-437-41	METAL GLAZE	1K	2%	1/10W
R440	1-208-425-41	METAL GLAZE	330	2%	1/10W
R441	1-208-425-41	METAL GLAZE	330	2%	1/10W

Ref. No.	Part No.	Description			Remark
R442	1-208-774-11	METAL GLAZE	470	2%	1/10W
R443	1-208-774-11	METAL GLAZE	470	2%	1/10W
R444	1-260-008-11	CARBON MELF	10K	2%	1/8W
R445	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R446	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
R447	1-208-539-11	METAL GLAZE	160K	2%	1/10W
R448	1-218-756-11	METAL GLAZE	150K	2%	1/10W
R449	1-259-989-11	CARBON MELF	330	2%	1/8W
R450	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R451	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R452	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R453	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R454	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R455	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R456	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R457	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R458	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R459	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R460	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R461	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R462	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R463	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R464	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R465	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R466	1-218-764-11	METAL GLAZE	330K	2%	1/10W
R467	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R470	1-260-032-11	CARBON MELF	1M	2%	1/8W
R471	1-260-017-11	CARBON MELF	56K	2%	1/8W
R472	1-260-012-11	CARBON MELF	22K	2%	1/8W
R473	1-260-012-11	CARBON MELF	22K	2%	1/8W
⚠R474	1-212-958-00	FUSIBLE	10	5%	1/2W F
R475	1-259-979-11	CARBON MELF	47	2%	1/8W
R476	1-208-462-41	METAL GLAZE	10K	2%	1/10W
R477	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R478	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R479	1-216-627-11	METAL CHIP	100	0.5%	1/10W
R480	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R481	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R482	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R485	1-259-940-11	CARBON MELF	30K	2%	1/8W
R486	1-260-032-11	CARBON MELF	1M	2%	1/8W
R490	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R491	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R492	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R493	1-208-526-41	METAL GLAZE	47K	2%	1/10W
R494	1-208-462-41	METAL GLAZE	10K	2%	1/10W
R500	1-249-696-11	CARBON	9.1K	5%	1/2W
R503	1-260-009-11	CARBON MELF	12K	2%	1/8W
R504	1-260-009-11	CARBON MELF	12K	2%	1/8W
R505	1-260-010-11	CARBON MELF	15K	2%	1/8W
R506	1-259-999-11	CARBON MELF	2.2K	2%	1/8W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
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Ref. No.	Part No.	Description			Remark
R509	1-259-987-11	CARBON MELF	220	2%	1/8W
R510	1-260-009-11	CARBON MELF	12K	2%	1/8W
R511	1-259-992-11	CARBON MELF	560	2%	1/8W
R512	1-259-983-11	CARBON MELF	100	2%	1/8W
R513	1-259-981-11	CARBON MELF	68	2%	1/8W
R514	1-260-002-11	CARBON MELF	3.3K	2%	1/8W
R515	1-259-996-11	CARBON MELF	1.2K	2%	1/8W
R516	1-260-008-11	CARBON MELF	10K	2%	1/8W
R517	1-260-008-11	CARBON MELF	10K	2%	1/8W
R518	1-259-983-11	CARBON MELF	100	2%	1/8W
R519	1-259-983-11	CARBON MELF	100	2%	1/8W
R521	1-249-667-11	CARBON	560	5%	1/2W
R523	1-260-032-11	CARBON MELF	1M	2%	1/8W
R524	1-249-665-11	CARBON	470	5%	1/2W
R525	1-259-992-11	CARBON MELF	560	2%	1/8W
R526	1-259-997-11	CARBON MELF	1.5K	2%	1/8W
R527	1-259-925-11	CARBON MELF	1.6K	2%	1/8W
R528	1-259-934-11	CARBON MELF	9.1K	2%	1/8W
R529	1-260-026-11	CARBON MELF	330K	2%	1/8W
R530	1-260-020-11	CARBON MELF	100K	2%	1/8W
R570	1-260-032-11	CARBON MELF	1M	2%	1/8W
R585	1-259-940-11	CARBON MELF	30K	2%	1/8W
R586	1-260-032-11	CARBON MELF	1M	2%	1/8W
		< VARIABLE RESISTOR >			
RV251	1-224-251-XX	RES, ADJ, METAL GLAZE 4.7K (IDLING R)			
RV352	1-224-251-XX	RES, ADJ, METAL GLAZE 4.7K (IDLING L)			
		< RELAY >			
RY101	1-755-061-11	RELAY			
RY102	1-755-061-11	RELAY			
RY103	1-755-061-11	RELAY			
RY104	1-755-061-11	RELAY			
RY105	1-755-061-11	RELAY			
RY106	1-755-061-11	RELAY			
RY107	1-755-061-11	RELAY			
RY201	1-755-061-11	RELAY			
RY202	1-515-833-11	RELAY			
RY203	1-755-061-11	RELAY			
RY204	1-755-061-11	RELAY			
RY210	1-755-061-11	RELAY			

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*	1-659-223-11	PRE OUT BOARD	
		**********	
		< CONNECTOR >	
* CN101	1-564-510-11	PLUG, CONNECTOR 7P	
* CN110	1-564-506-11	PLUG, CONNECTOR 3P	
* CN120	4-924-264-21	TERMINAL, MOUNT	

Ref. No.	Part No.	Description	Remark
		< JACK >	
J110	1-568-250-21	JACK, PIN 2P (PHONO)	
J111	1-568-250-21	JACK, PIN 2P (PRE OUT)	

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*	1-662-745-11	SP OUT BOARD	
		**********	
		< CONNECTOR >	
CN108	1-568-106-11	PIN, CONNECTOR 4P	
		< TERMINAL >	
TM101	1-537-235-21	TERMINAL BOARD (SPEAKERS)	

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*	1-659-229-11	TONE BOARD	
		**********	
		< CONNECTOR >	
* CN207	1-564-509-11	PLUG, CONNECTOR 6P	
* CN209	1-564-509-11	PLUG, CONNECTOR 6P	
		< VARIABLE RESISTOR >	
RV603	1-225-168-11	RES, VAR, CARBON 75K/30K (TREBLE)	
RV604	1-225-172-11	RES, VAR, CARBON 150K/60K (BASS)	

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*	1-659-231-11	VOLUME BOARD	
		**********	
		< CONNECTOR >	
* CN605	1-564-507-11	PLUG, CONNECTOR 4P	
		< VARIABLE RESISTOR >	
RV601	1-225-166-11	RES, VAR, CARBON 30K/30K (VOLUME)	

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		MISCELLANEOUS	
		**********	
12	1-776-183-11	WIRE (FLAT TYPE)	
57	1-533-783-11	HOLDER, FUSE	
62	1-506-113-00	SHORT PLUG	
⚠F401	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
⚠F402	1-532-506-51	FUSE, TIME LAG (T6.3AL/250V)	
⚠F701	1-532-465-51	FUSE, TIME. LAG (T3.15AL/250V)	
⚠T901	1-429-749-11	TRANSFORMER, POWER	

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Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		******	
⚠	1-551-631-22	CORD, POWER	
	3-810-424-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, GERMAN,SPANISH,DUTCH,SWEDISH, ITALIAN,PORTUGUESE)	
*	4-979-130-01	CUSHION (REAR)	
*	4-979-396-01	CUSHION (FRONT)	
*	4-983-820-01	INDIVIDUAL CARTON	

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HARDWARE LIST

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#1	7-682-547-09	SCREW +B 3X6
#2	7-685-871-09	SCREW +BVTT 3X6 (S)
#3	7-682-655-09	SCREW +PSW 3X30
#4	7-685-659-79	SCREW +BVTP 4X8 TYPE2 IT-3
#5	7-685-548-21	SCREW +BTP 3X12 TYPE2 SLIT
#6	7-685-646-79	SCREW +BVTP 3X8 TYPE2 SLIT
#7	7-682-560-04	SCREW +BVTT 4X6 (S)
#8	7-685-871-01	SCREW +BVTT 3X6 (S)

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Replace only with part number specified.

9-960-439-11
(G)

Sony Corporation
Home A&V Products Company

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